

# Learning at the digital physical interface

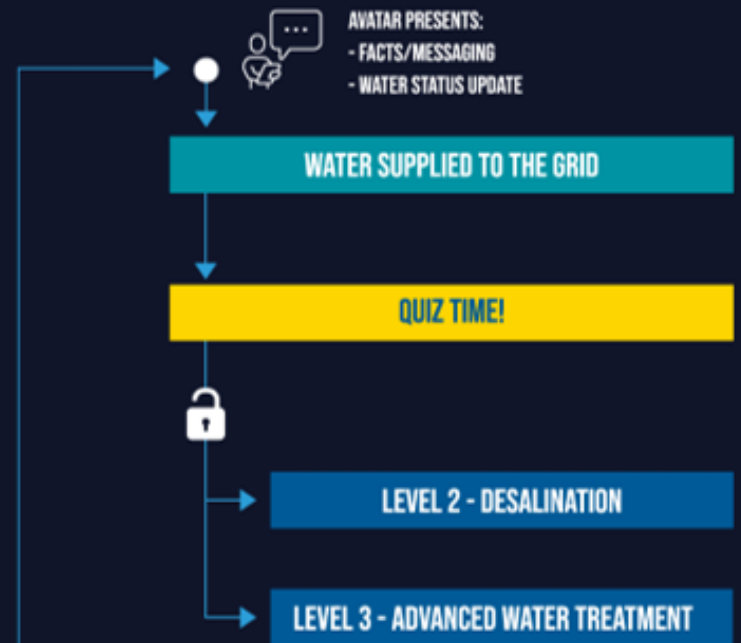
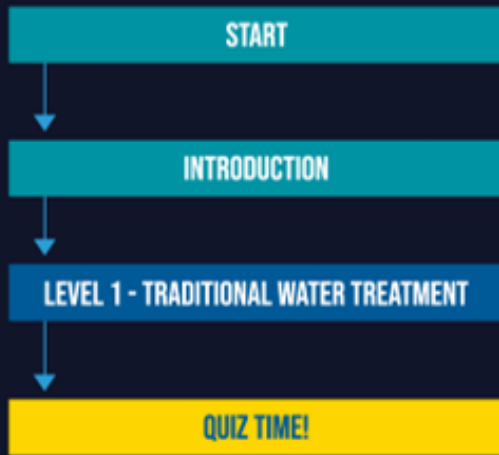
How can we design technologies to support learning  
and engagement

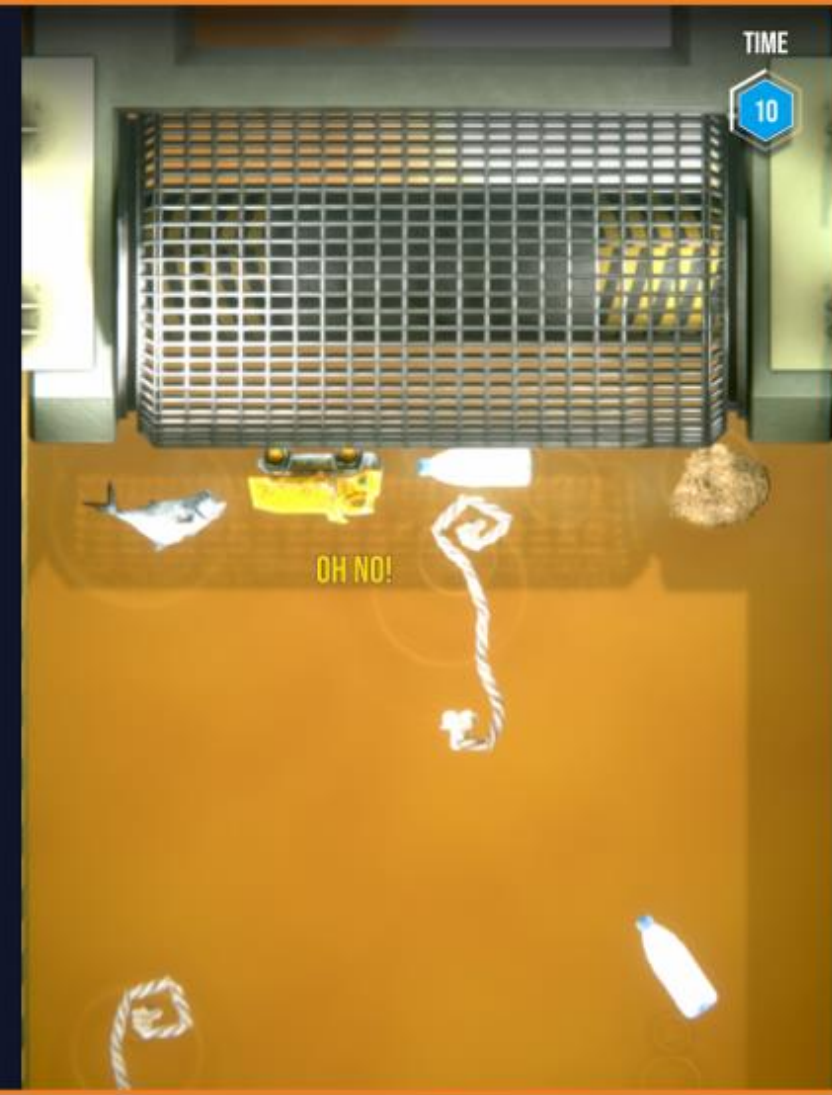
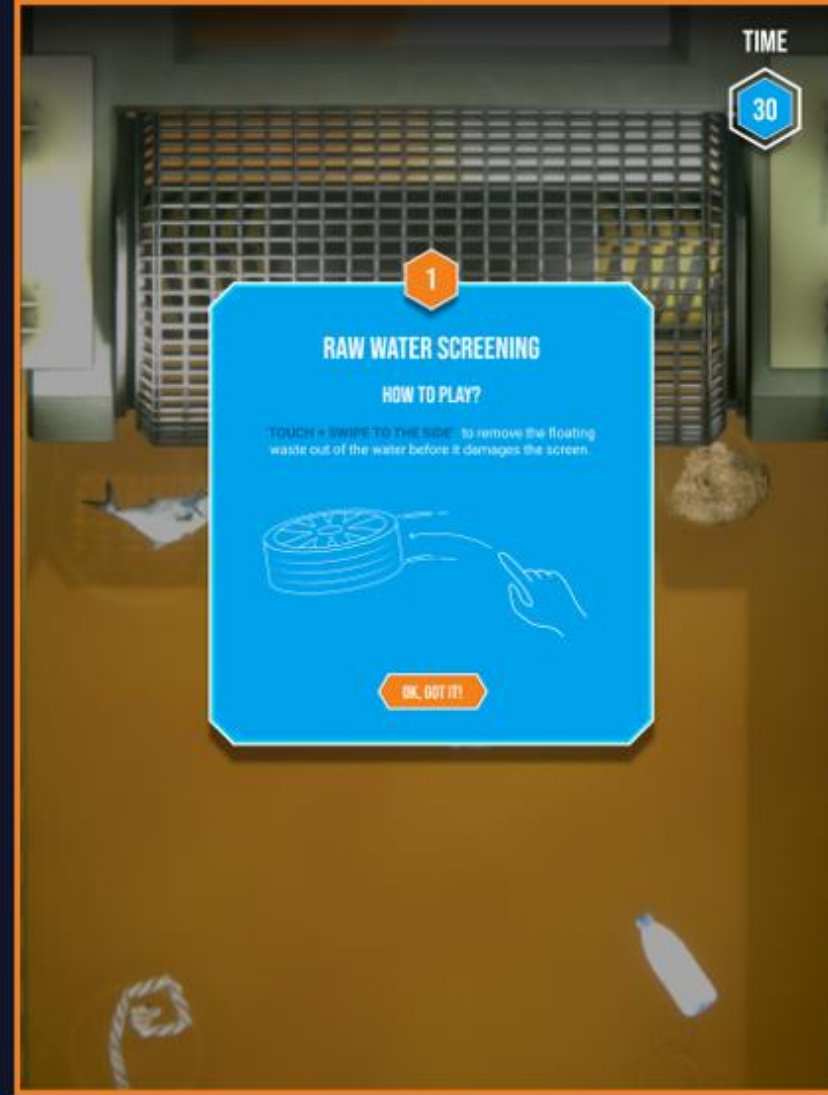
# Queensland University of Technology

- Thom Saunders
- Program Coordinator
- VISER – Visualisation and Interactive Solutions for Engagement and Research

# Engagement & understanding

- Digital tools can successfully build a bridge between engagement and understanding (not directly learning)
- Provide an in-depth understanding of the subject matter
- Analysis and understanding the audience through data capture and interaction





 **AVATAR PRESENTS:**

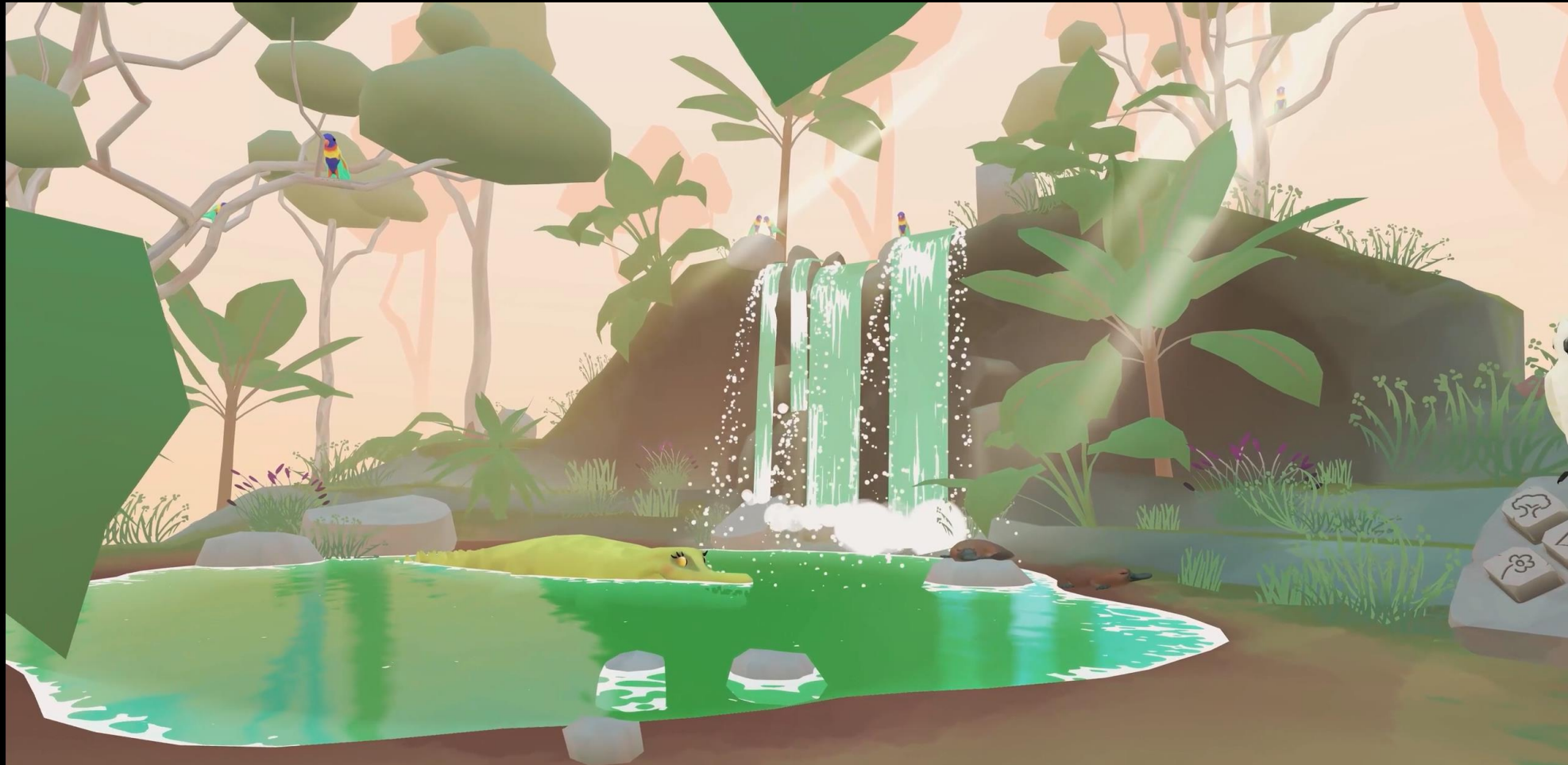
- FACTS/MESSAGING
- WATER STATUS UPDATE



**GAME 1: RAW WATER SCREENING**







**Explore the Queensland Rainforest in Virtual Reality.**

# User centric

- Understanding how audiences interact digital products
- Takes a combination of different processes, skills, and disciplines
- Challenge to identify a “unique creative” concept for presenting complex systems in an engaging way

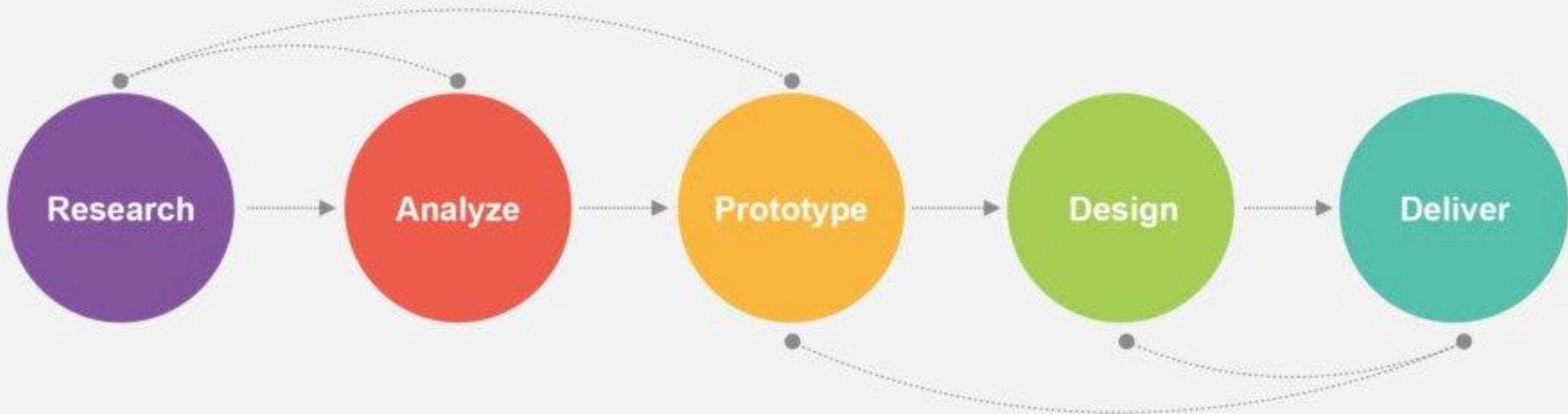


Discovery + Research

Insights + Ideation

Design Concepts

Detailed Design + Visual Storytelling



- Stakeholder workshops
- User interviews
- Contextual inquiries
- Expert interviews
- Empathy maps
- Heuristics
- Competitive analysis
- Data analysis

- Personas
- User journeys
- User stories
- Task flows
- Low-fi wireframes
- Screen flows
- Information architecture

- Ideation
- Concept sketches
- Mid fidelity mockups
- Interactive prototypes
- User testing
- Concept validation

- High fidelity design
- Interactive prototypes
- Usability testing
- Style guide
- Annotated wireframes

- Developer handover
- Design reviews
- User testing
- Iterations

## TASKS

What tasks are users trying to complete? What questions do they need answered?

## INFLUENCES

What people, things or places may influence how the user acts?



## FEELINGS

How is the user feeling about the experience? What really matters to them?

## NAME

## PAIN POINTS

What pain points might the user be experiencing that they hope to overcome?

## OVERALL GOAL

What is the users ultimate goal? What are they trying to achieve?

# Engagement

- Collaboration and negotiation
- Social interactions



## TWINSROOM

Take me to...

[Logout](#) | [Your Details](#) | [How to Play](#) | [Forums](#)



**DRAWER 1**



## DRAWER 1

[YOUR CLUES](#) | [MYSTERY](#) | [SUBSCRIPTIONS](#) | [REWARDS](#) | [YOUR DETAILS](#)



### BONUS POINTS

ENTER CLUE CODES HERE

Enter the Bonus Clue-Code you've found from Fat Cow Websites, Email, SMS, MMS and ITV to add the bonus points to your tally.

#### CLUE CODES AVAILABLE



TOTAL BONUS POINTS

65

### CLUE QUESTIONS

POINTS

1	2	3	4	5	6	90
---	---	---	---	---	---	----

You need 100 points to get the Secret Password to **Martin's computer** where you'll find the solution to this week's mystery, and be eligible to be **enter** into this week's prize draw if you're one of the week's top scorers.

And remember, there are 250 Game points available each week, and, at the end of the Game, if you're one of the highest point-scorers, you could win HUGE prizes!

So keep looking for bonus points on-line. **Click here** to register for more SMS & Email Clues or call 1800 932 825 to hear bonus clues! Cells cost 55c per minute incl. GST (more for mobiles & payphones) 1800 numbers are not available on all mobiles. There is more mischief to be had and more points to be found!

YOUR POINTS THIS WEEK

155

This week's Secret Password: **BREAKANDENTER**







# Building Catchment Resilience

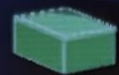
- Range of different user types
- VR application
- Highly complex system
- Data driven
- Presentation of mathematical modelling



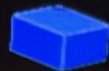


4-of-7039

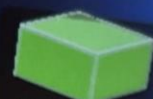
1 2 3



Sediment  
[92%]



Dissolved  
Nitrogen  
[99%]



Particulate  
Nitrogen  
[95%]

[ALL]

Tonnes per Year (t/y)

69.8 | 73.3

\$1,042,046

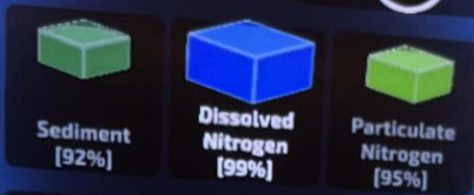
Opportunity



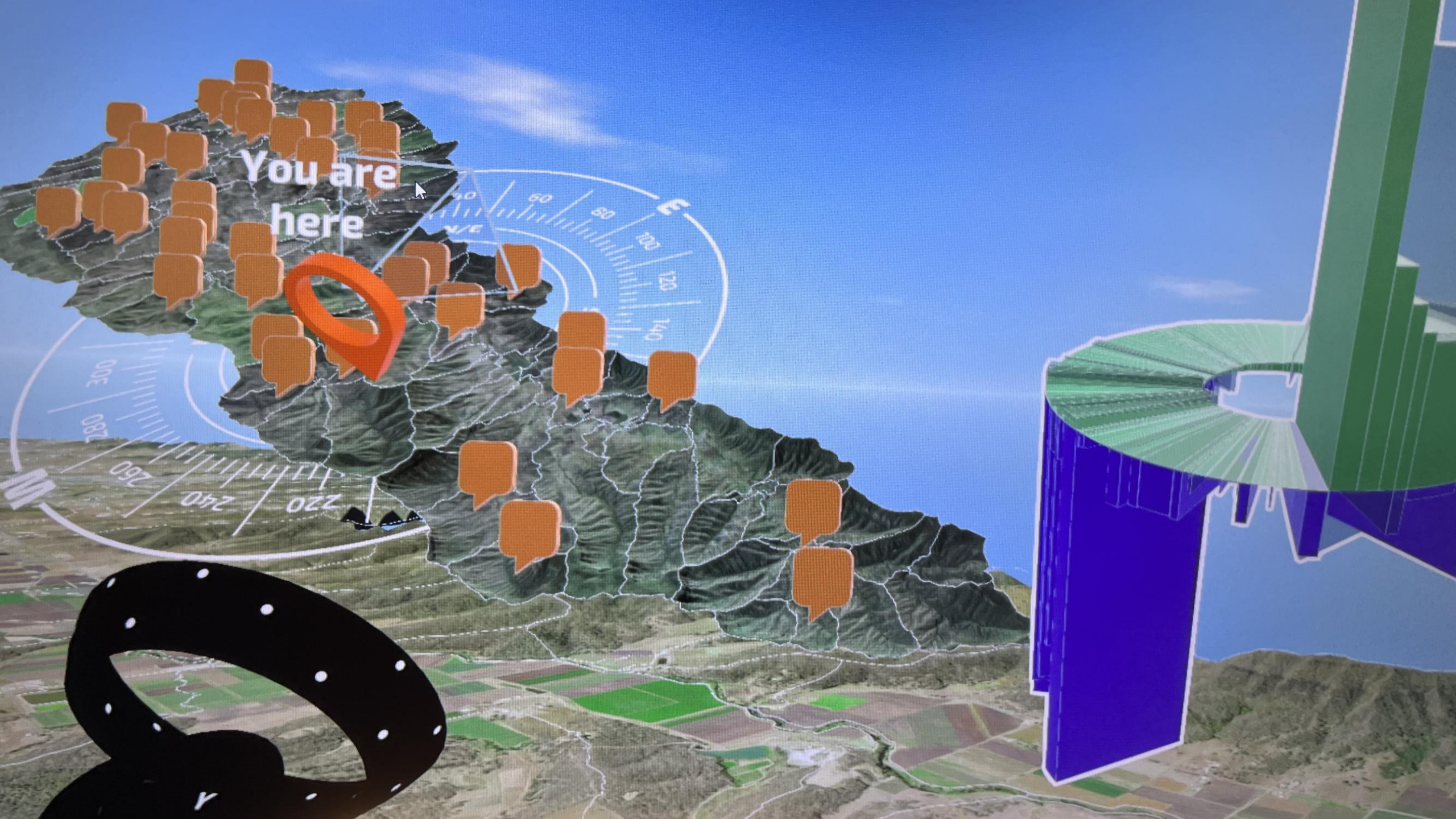
Implementation



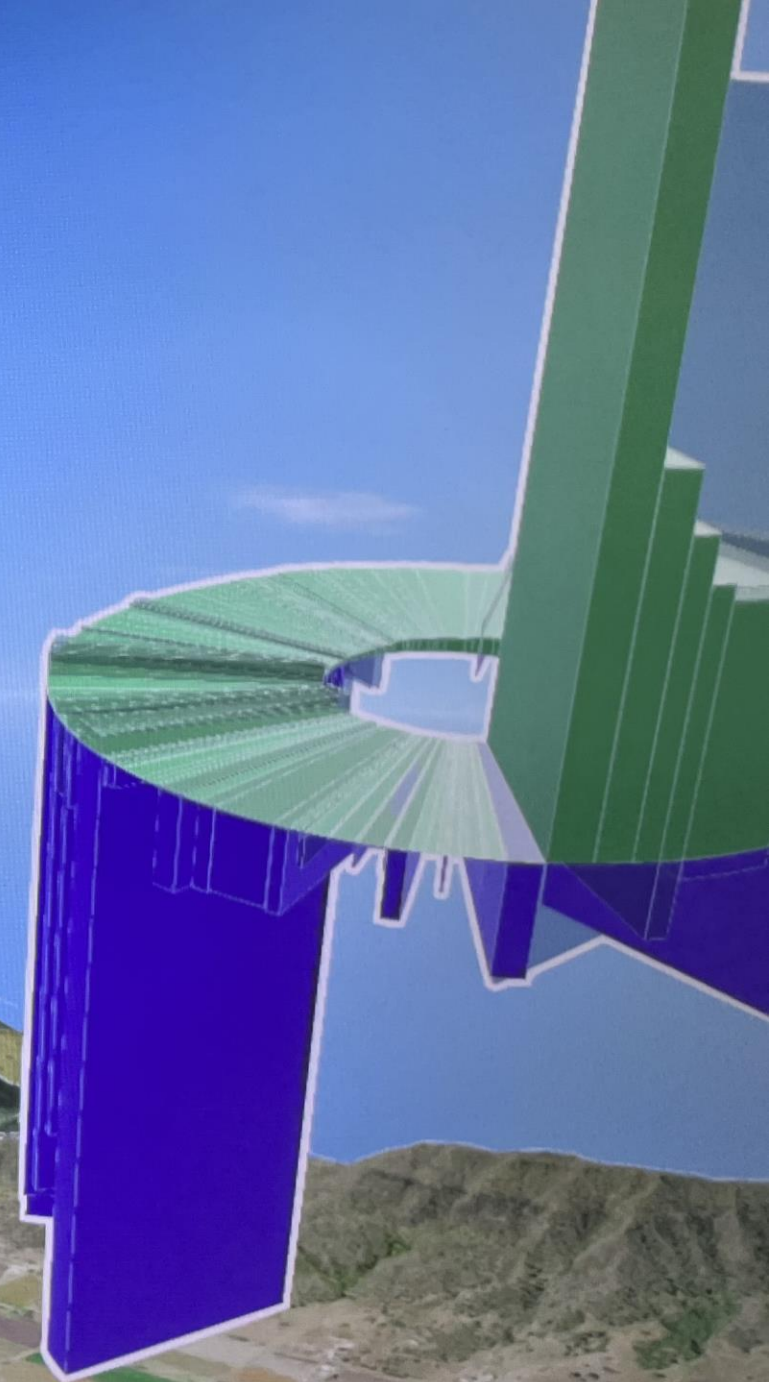








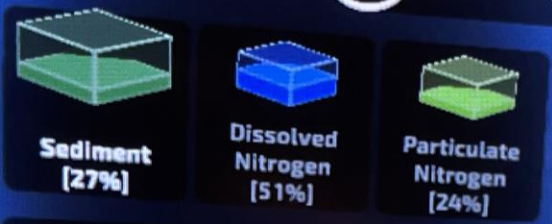
You are here





SCENARIOS

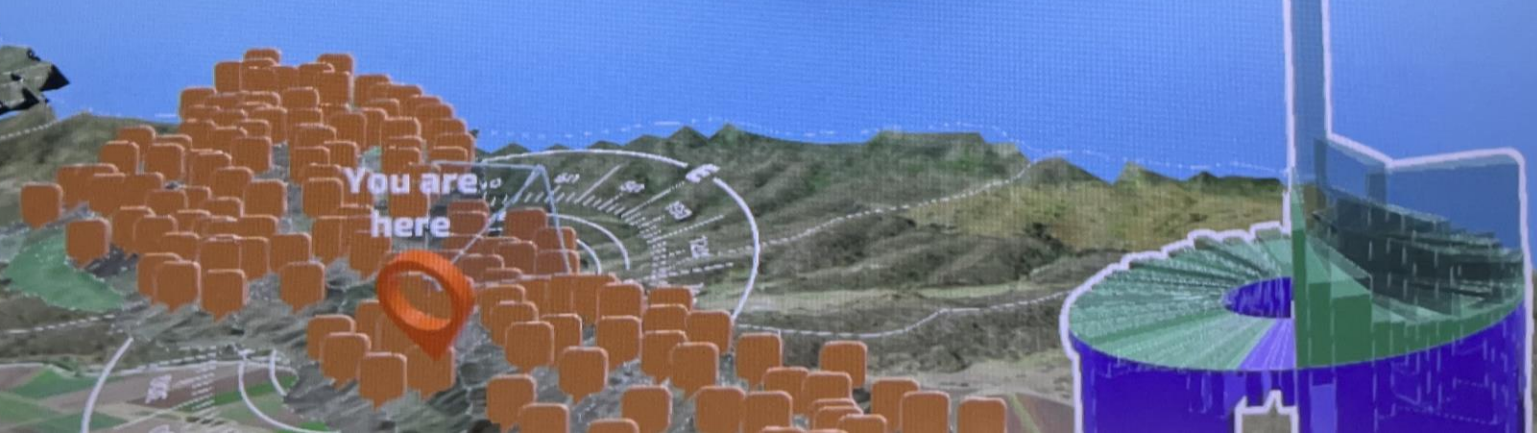
Low DN PN 1 2 3



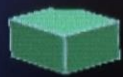
[ALL] Tonnes per Year (t/y)  
3,819.3 | 14,090.2

\$428,790,800

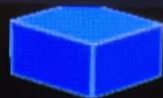
Opportunity Implementation



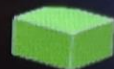




Sediment  
[100%]



Dissolved  
Nitrogen  
[100%]



Particulate  
Nitrogen  
[100%]

[ALL]

Tonnes per Year (t/y)

171.4 | 171.4

\$0

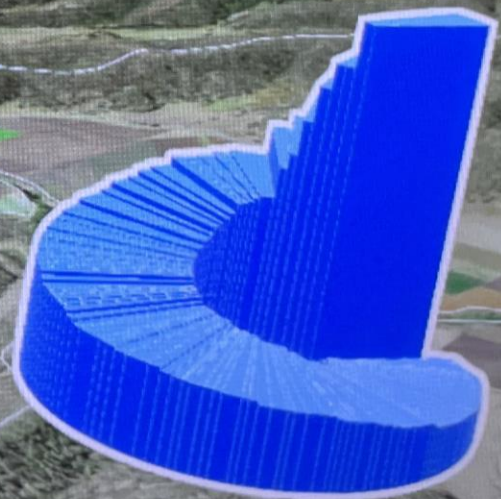
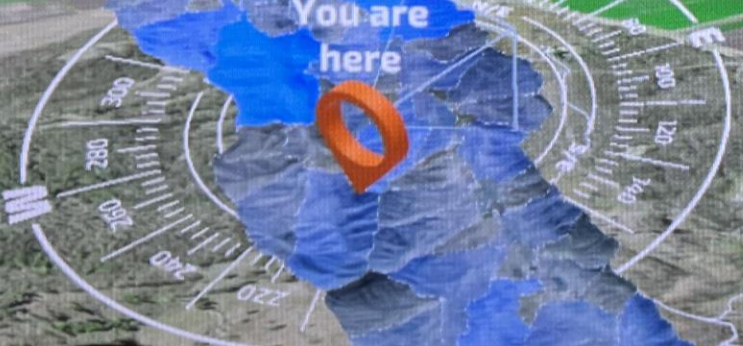
Opportunity



Implementation



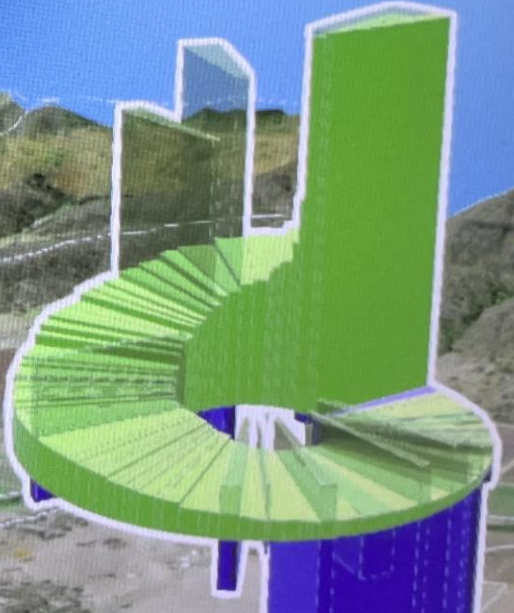
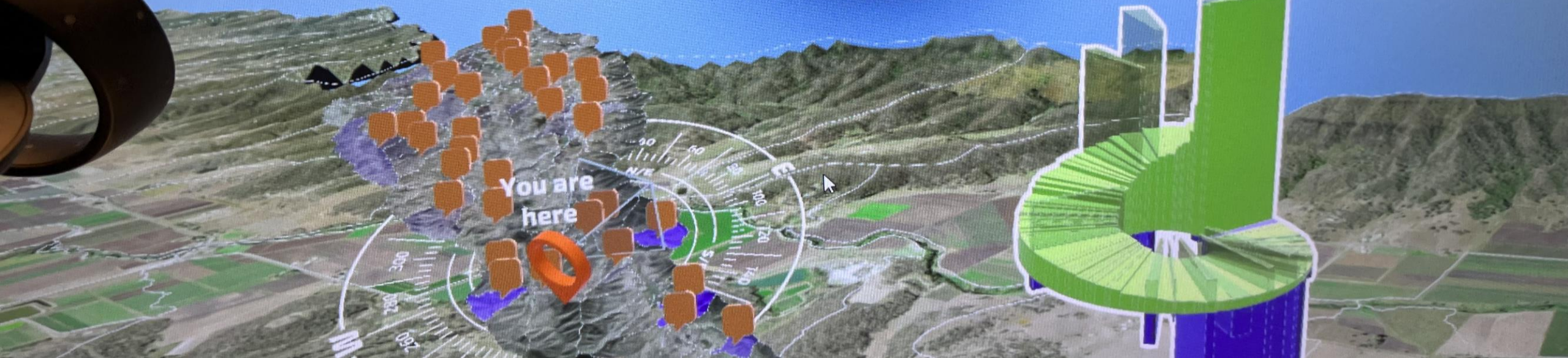
You are  
here





# Low SED

1 2 3



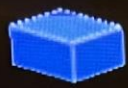


# Low SED

1 2 3



Sediment  
[79%]



Dissolved  
Nitrogen  
[95%]



Particulate  
Nitrogen  
[82%]

[081]

Tonnes per Year (t/y)

1.3 | 5.1

\$2,989,670

Opportunity  Implementation 

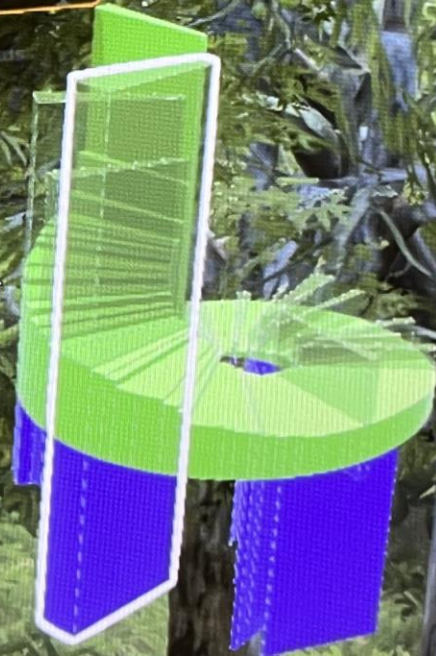
Management Actions

Gully

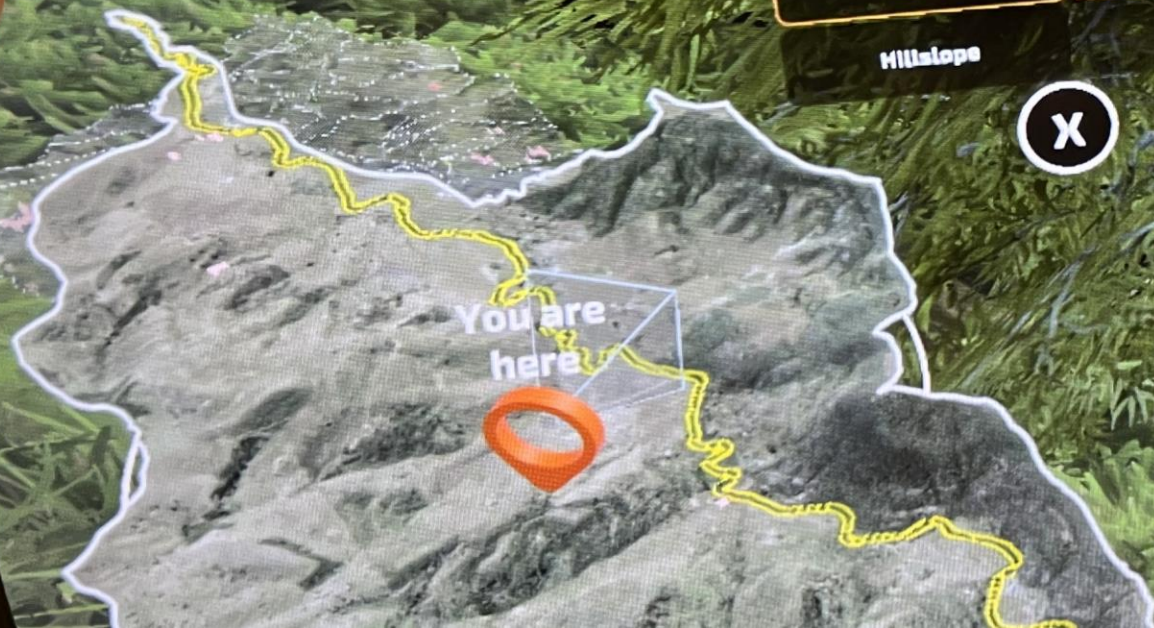
Riverbank

Hillslope

Wetlands



You are here





\$12,015,820

Opportunity

Implementation

Management Actions

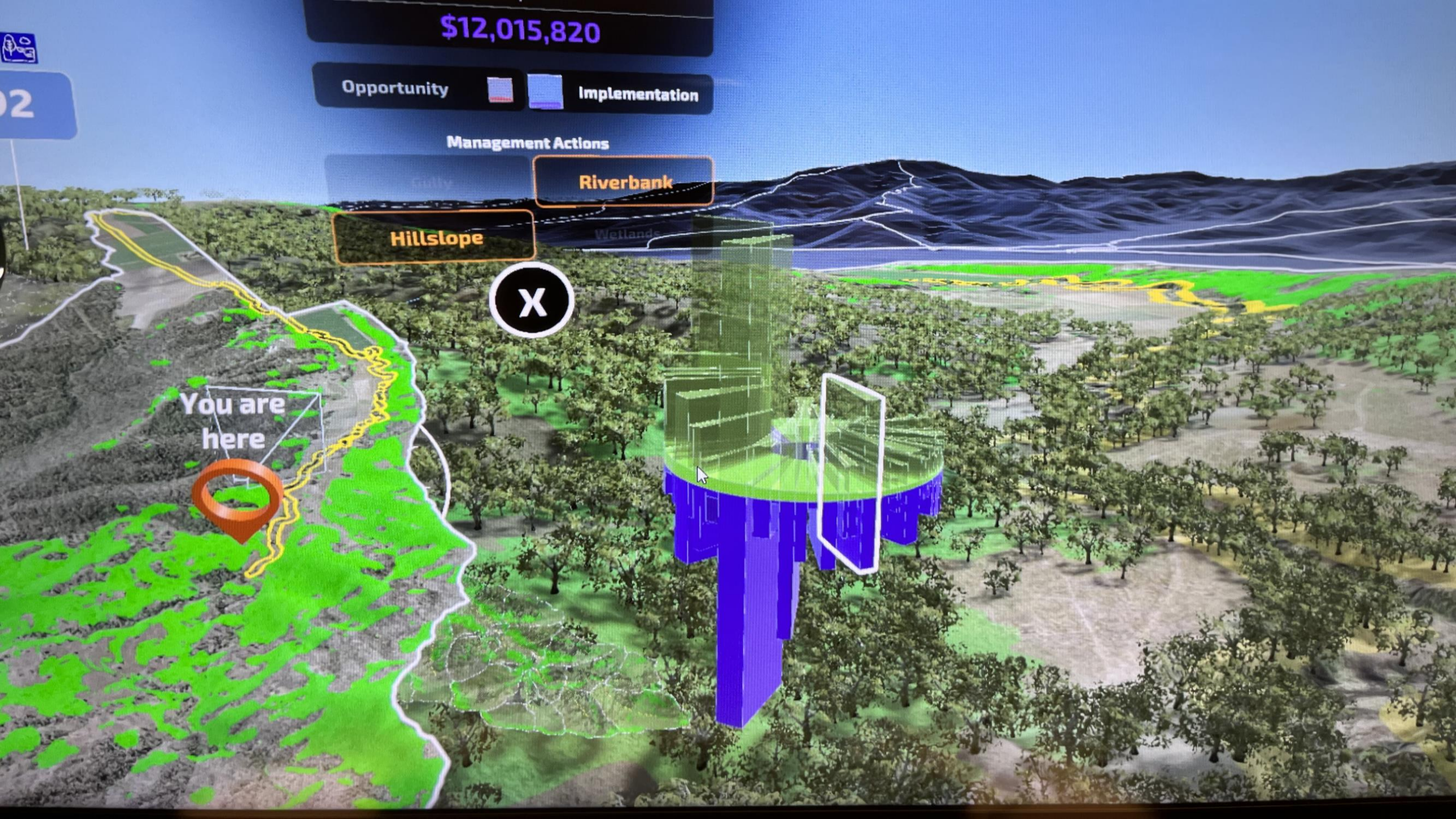
Hillslope

Riverbank

X

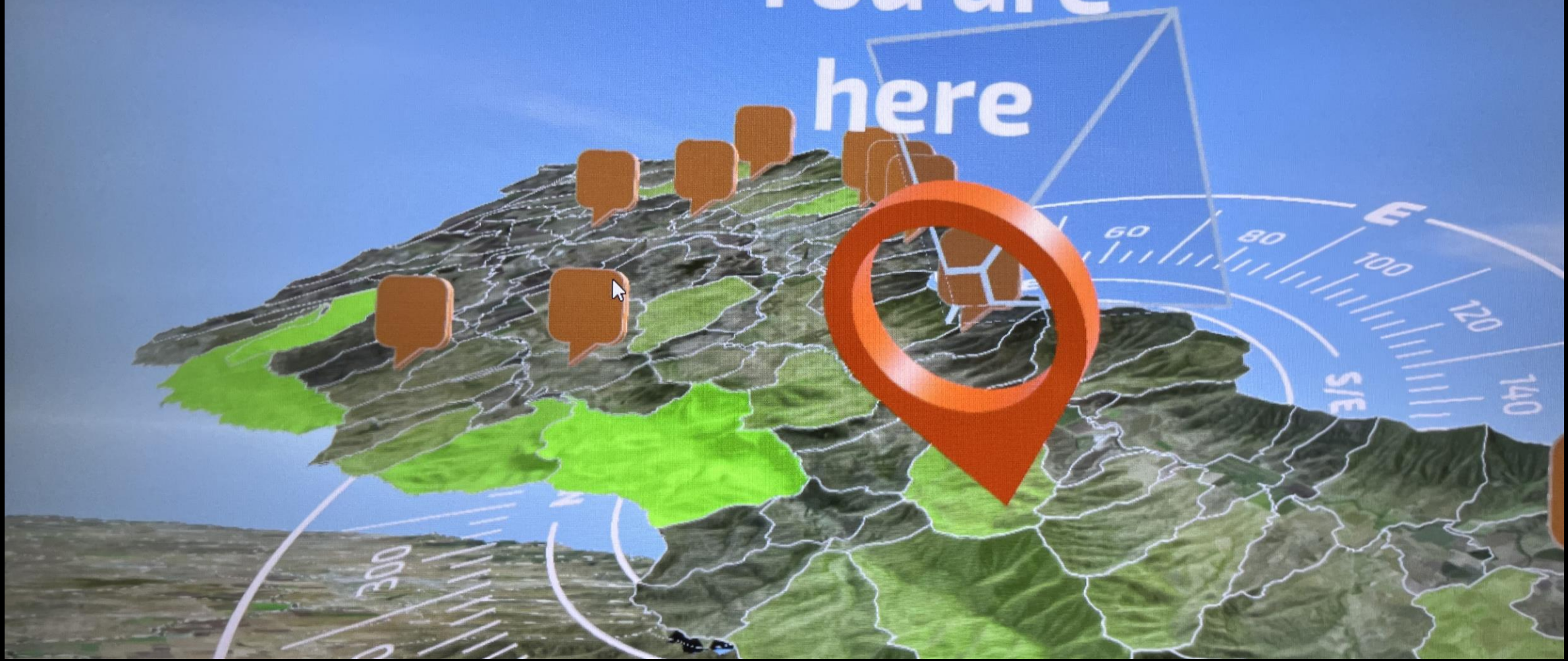
You are here

02





You are  
here



Thanks very much